DOCUMENT RESUME

ED 093 521 RC 007 977

AUTHOR Quintanar, Rosalinda
TITLE A Comparative Study of Students' Attitudes Toward Education.
PUB DATE May 74
NOTE 103p.; M.A. Thesis, New Mexico State University, Las Cruces, N.M.

EDRS PRICE MF-$0.75 HC-$5.40 PLUS POSTAGE
DESCRIPTORS *Anglo Americans; Change Agents; College Students; *Comparative Analysis; *Educational Attitudes; *Foreign Students; *Mexican Americans; Non Western Civilization; Role Perception; Student Motivation; Teacher Orientation

ABSTRACT

The comparative analysis of students' attitudes included Mexican American, Anglo, and Asian students (from Thailand, Taiwan, and the Philippines). A Likert scale was used to measure all attitudes. All analysis performed utilized cross tabulation and chi square. The attitudes studied were reasons for going to college; concept of an educated person -- whether they should have a technical orientation or a broader interest in life; student versus professional orientation of professors; and student-professor distance. Asian students appeared to be more collectively oriented than U.S. students, and also thought the educated person should have a broader orientation in life. Both Asian and U.S. students favored professors' attitudes being more student than professionally oriented. Asian students did perceive more distance between themselves and their professors. No significant differences were found between Mexican American and Anglo students' attitudes toward education. Socioeconomic status, as measured by occupation, education, and income, did not appear to influence the reasons students have for going to college and was not related to other attitudes. Neither sex, nor rural/urban residence, were related to attitudes toward education. (Author/KM)

ED 093521

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

BEST COPY AVAILABLE

A COMPARATIVE STUDY OF STUDENTS' ATTITUDES TOWARD EDUCATION

BY

ROSALINDA QUINTANAR, B.A.

A Thesis submitted to the Graduate School
in partial fulfillment of the requirements
for the Degree
Master of Arts

Major Subject: Sociology
Minor Subject: Social Welfare

New Mexico State University
Las Cruces, New Mexico
May 1974

Rc 007922

"A Comparative Study of Students' Attitudes Toward Education," a thesis prepared by Rosalinda Quintanar in partial fulfillment of the requirements for the degree, Master of Arts, has been approved and accepted by the following:

Dean of the Graduate School

Clyde Eastman

Chairman of the Examining Committee

Date

Committee in charge:

Dr. Clyde Eastman, Chairman

Dr. James R. Taylor

Dr. Basilio Rojas

Dr. Joseph W. Rogers

Mr. Antonio Lujan

VITA

May 30, 1947 - Born at Torreon, Coahuila, Mexico.

1971 - B.A., Institutuo Familiar y Social, Torreon, Coahuila, Mexico.

1972 - B.A., New Mexico State University

1972 - Graduate Assistant, Department of Sociology, New Mexico State University.

PROFESSIONAL AND HONORARY SOCIETIES

Asociacion Nacional de Trabajadores Sociales, Mexico, D.F.

PUBLICATIONS

Quintanar, Rosalinda, "La Funcion del Trabajador Social Ante el Problema de la Tuberculosis Pulmonar."

FIELDS OF STUDY

Major Field: Sociology

ACKNOWLEDGMENTS

The author wishes to thank Dr. Milton Snodgrass for the use of his data, and Dr. Clyde Eastman for his advice and guidance in the writing of this thesis. Special recognition is expressed to Dr. Joseph W. Rogers for his wise counseling and direction throughout my graduate program. Thanks are due to Dr. James Taylor for his assistance and friendship. Also appreciation is due to Dr. Bradley Blake for his counsel and help. Mr. Antonio Lujan provided valuable new learning experiences and insights that contributed so much to her education. Special acknowledgment is due to Dr. Basilio Rojas for his excellent guidance in the statistical analysis. Thanks go to Mr. Bill Boverman for programming and to Ms. Barbara Beckner for the typing of this manuscript. The author is also indebted to the following persons who contributed to the completion of this thesis with their understanding and encouragement: Mrs. Delfina Chavez, Mr. Robert Stewart and Mrs. Norma Silva.

To My Parents:

Lauro Quintanar Ortega

Leonor Sarellana de Quintanar

ABSTRACT

A COMPARATIVE STUDY OF STUDENTS'
ATTITUDES TOWARD EDUCATION
BY
ROSALINDA QUINTANAR, B.A.

Master of Arts in Sociology
New Mexico State University
Las Cruces, New Mexico, 1974
Doctor Clyde Eastman, Chairman

This is a comparative analysis of students' attitudes including Mexican-American and Anglo American and students from three Asian countries: Thailand, Taiwan, and the Philippines. A Likert scale was used to measure all attitudes. All analyses performed utilized cross tabulation and chi square.

The attitudes studies were reasons for going to college, concept of an educated person - whether they should have a technical orientation or a broader interest in life, student vs. professional orientation of professors, and student-professor distance.

Asian students appear to be more collectively oriented

than United States students. Asian students also think the educated person should have a broader orientation in life. Both Asian and United States students favored the professors' attitudes being more student than professionally oriented, although United States students were somewhat more student oriented. Another finding was that Asian students do perceive more distance between themselves and their professors than American students. No significant differences were found between Mexican-Americans and Anglo students' attitudes toward education. Socioeconomic status, as measured by occupation, education and income, does not appear to influence the reasons students have for going to college and is not related to other attitudes. Neither sex, nor rural/urban residence were related to attitudes toward education.

TABLE OF CONTENTS

LIST OF TABLES viii

CHAPTER I - INTRODUCTION 1
The Conflicting Roles of the University 1
Objectives of the Study 5

CHAPTER II - THEORY AND PREVIOUS WORK 7
Paulo Freire's Theory 7
Ivan Illich's Theory 14
Previous Studies on Students' Attitudes 17
Hypotheses 36

CHAPTER III - METHODS 40
Sampling Procedures and Data Collection 40
Measurement of Variables 43
Analytical Methods 48

CHAPTER IV - RESULTS 50
Collective vs. Individual Orientation 50
Cultural vs. Technical Orientation 52
Professional vs. Student Orientation 54
Student-Faculty Distance 56
Anglos and Mexican-Americans Compared 56
Influence of Family Income on Attitudes 64
Socioeconomic Status and Collective vs. Individual Attitudes 64
Influence of Sex on Attitudes 66

CHAPTER V - CONCLUSIONS ON HYPOTHESES 69
Applications 73
Suggestions for Further Research 75

BIBLIOGRAPHY 77

APPENDIX 84

LIST OF TABLES

Table		Page
1.	Frequency Distribution for Collective and Individual Reasons for Going to College by Ethnicity	51
2.	Frequency Distribution Toward the Cultural and Technical Orientation of an Educated Person by Ethnicity	53
3.	Frequency Distribution of Professional vs. Student Oriented Activities of Professors by Ethnicity	55
4.	Frequency Distribution of Student-Faculty Distance by Ethnicity	57
5.	Frequency Distribution of Attitudes Toward the Existing Memorization in Education	60
6.	Frequency Distribution of Attitudes Toward the Existing Communication in Education	61
7.	Frequency Distribution of Attitudes Toward the Adapting vs. Transforming Function of Education	62
8.	Frequency Distribution of Attitudes Toward Students' Autonomy in Education	63
9.	Collapsed Frequency Distribution of High and Low Income Students and Reasons for Going to College	65
10.	Frequency Distribution of Transformation vs. Adaptation Scale of Anglo Students by Sex	68

CHAPTER I

INTRODUCTION

THE CONFLICTING ROLES OF THE UNIVERSITY

There exists a continuous struggle in the academic world to adapt new values to older traditional life styles and vice versa. Students and society as dynamic organisms are forever in a process of change and adaptation. In the process they go through phases of experimentation and transition that are sometimes painful and often incomprehensible. Should students strive for their own perception of life or should they learn to adapt reality into the narrow frame of society's values? Often students' opinions differ from those presented by professors and society in general causing dissension between conformism or opposition. The function of the university is open to debate - should it concentrate on turning out experts in technology or in applied social service functions or should it question the foundations upon which the society is based? Should students be geared toward inquiry or led into a submissive acceptance of values, philosophies and facts that are bestowed upon them? The old university was a liberated zone for discovery and the discussion of ideas both old and new. Teachers and students gathered to read

the texts of other writers and the living words of the dead masters gave new perspectives to the fallacies of the present day. The university was then a community of academic quest and unrest (Ivan Illich, 1970:45).

As the university increasingly becomes a rationalized tool for producing humans that will maintain society's functioning, it seems that it must place students and faculty into a position of diminished power (Sampson and Korn, 1970:6-14). Yet, at the same time, it still seeks to instruct in the classical academic values of inquiry and critical thought. When this inquiry is applied to one's limited ability to influence outcomes even in the university, not to mention changes in the larger society and world, something in the system is disrupted. Students may question the educational system and social institutions, they may see where reforms are needed but they are powerless to create them. To maintain a balance it would be necessary to have a more stable outside world or an entirely closed and protected academic structure in order to work effectively. It is unsettling to learn some values at home and then to question them in college.

The university has often taken on roles and functions which depart from the usual values of the academic tradition. The university can be viewed as a gigantic business enterprise, and faculty many times appear as businessmen, negotiating for research funds, courses to be taught, and grades. Students have to fulfill certain requirements in

order to qualify for a specific grade and accumulate a number of courses to obtain a degree. The reasons students have for going to college are also contradictory. Some students want to earn a degree because it means more money. They want to acquire the technical training and facts they will need in their jobs. Their only goal is good grades, and they attain them even if it means being harsh competitors with classmates. They learn what the professor wants them to learn - their ability for taking exams is formidable. These students usually possess a lot of self-confidence and can lead very impressive yet meaningless discussions. Many professors naively refer to this characteristic as "intelligence." The above situation is one which many professors and students enjoy, in which they learn what is convenient for them to learn, without ever questioning. They are faithful to the system that provides them with salaries and research money.

There are some students, though, that attend to learn about themselves and the people around them. They are seeking to develop a personal ethic. They are not interested in memorization. Still others, usually called "dreamers or idealists," hope they can contribute to make a positive change in society. They want a campus that is community and world oriented. Also, some students attend college with a desire to fulfill their personal goal of acquiring more knowledge, a broader perspective of life.

The expectations and objectives of students in the university are unlimited. It is hard to imagine a university that will meet the expectations of different kinds of students, that is why it is common to find tired and disillusioned upperclassmen and optimistic freshmen (Sampson and Korn, 1970:15-20).

Some of the criticisms most often voiced by American students are that the American system of higher education relies heavily on theories and programs fashioned to satisfy a group, or even a mass of students, without regard for the diversity within it. While there are a few denominators common to all students, these are less relevant to human development than the characteristics which differentiate one student from another (Paul Danish, 1966:3). The students generally felt that the present system would work well as it is, if the people running it were differently motivated, if they oriented programs toward the individual first, last, and foremost.

Educational institutions are responsible for seeing to it that each succeeding generation comes to share enough of the values of the preceding generation for the social continuity to be maintained. It seems as if educational institutions have a simplistic conception of this part of their role. Because universities are important to men, it is distressing when universities do not do so well as seems possible for them to do with the massive resources

that have been and that are being devoted to their operation (Campbell, 1972:3).

OBJECTIVES OF THE STUDY

Many philosophers and educators have written about the role of the university, faculty and student participation. It seems only fair and logical that students' feelings and attitudes be considered when setting up educational programs. Numerous studies have been done on student attitudes in the United States, but cross-cultural comparisons are less abundant.

This study compares students' attitudes in very different societies with the purpose of gaining insight on culturally-bound values and the extent to which students are predisposed by their social setting. The specific questions to which this study addresses itself are the attitudes students have toward present day education, how they view it, and their opinion of a professor's activities and the position in which they see themselves in relation to the teacher and the university. Also, what are the reasons that stimulate students to attend college and how will they, as professionals, relate to the social system? Are students' attitudes influenced by social status, environment or sex? It will be useful to study the relationship that exists between the students' social milieu and the institutions they interact with. It seems

important to search and evaluate continually the process of education and its link with the cultural environment. Students are key participants who can help promote a better understanding and offer suggestions of how to improve the educational institution. Data on students' attitudes from Taiwan, Thailand, Philippines and two ethnic groups from the United States are compared in this study. In the United States the two ethnic groups studied are Anglos and Mexican-Americans. The term Mexican-Americans is used in reference to persons of Mexican ancestry because it was considered the most consistent with current usage.

This study will be useful to students and teachers who are interested in the mental and personal growth that is expected to be acquired in an institution designated to promote learning. It may help to provide insights on how students feel and the type of reforms needed in the academic world. Results from the data compiled from different countries will help to compare the various educational environments and the way students are influenced. Hopefully, it will provide a partial answer to the existing discontent which is manifested in multiple ways, at times with violent demonstration or with apathy. It is commendable to learn what students think of the academic world and its relation to society.

CHAPTER II

THEORY AND PREVIOUS WORK

PAULO FRIERE'S THEORY

The thesis has been stimulated by the thought and work of Paulo Friere, a Brazilian educator, born in 1921. Paulo Friere, a brilliant and sensitive person, directs his philosophy and methodology in liberating man, his mind, conscience and actions. Man should be able to express himself, create and grow. He believes that present day education "submerges" man into a regulated and automated world, depriving him of the privilege of thinking, questioning and evaluating his actions, of being human.

If present day education is analyzed, one can find that the student-teacher relationship is basically narrative (Freire, 1972:67-62). It involves a narrating subject, the teacher and a listening object, the student. Instead of approaching reality as if it were motionless, his task is to "fill" the students with the contents of his narration-contents that are very distant from reality. The outstanding characteristic of this narrative education is the ostentation of words, not their transforming power.

Speaking the word is not a true act if it is not at the same time associated with the right of self-expression and world expression, of creating and participating in society's historical process. Narrative education encourages the student to memorize class material mechanically. It turns him into a "container," or a "receptacle" to be "filled" by the teacher. The more completely he fills the receptacles, the better teacher he is. The more meekly the receptacles permit themselves to be filled, the better students they are. This is the "banking concept of education," in which the scope of action allowed to the students extends only as far as receiving, filing and storing the deposits. Instead of communicating, the teacher merely deposits and the student patiently receives, memorizes and repeats without ever questioning or defying or reconsidering the facts bestowed on him. He does have the opportunity of becoming collectors or cataloguers of the things they store. In the last stage, though, it is men themselves who are filed away through the lack of creativity, transformation and knowledge in this misguided system. Men cannot be truly human when they divorce themselves from inquiry, from praxis. Praxis can be defined as the necessity of men to recognize the causes for their oppression or the conflicting forces that impede their human fulfillment. Only through such understanding can man

perform a transforming action that will create a new situation (Freire, 1972:64-70).

Knowledge emerges only through action and reflection, through a restless and impatient inquiry in the world, with the world, and with each other. In the banking concept of education, knowledge is possessed only by those who consider themselves knowledgeable and it may be handed out to those whom they consider to know nothing. The teacher presents himself to his students as their necessary opposite; by considering their ignorance absolute, he justifies his own existence. True education must begin with the solution of the teacher-student contradiction so that both are simultaneously teachers and students. The banking concept of education regards men as beings that should be molded and manipulated. The more students work at storing the deposits entrusted to them, the less they develop the critical consciousness which would result from their intervention in the world as transformers of that world. The more passively students accept the courses and lectures, the more they tend simply to adapt to the world as it is and to the fragmented view of reality deposited in them (Freire, 1970b:212-213).

Those who use the banking approach consciously or unconsciously, for there are innumerable bank-clerk teachers who are so alienated they have never questioned

the way they relate to their students, don't realize they are serving only to dehumanize. They are not aware that the deposits themselves contain contradictions about reality (Freire, 1970b:452-45). There are different values that contrast and come into conflict. The term "contradiction" denotes the dialectic conflict between opposing social forces. These contradictions may lead formerly passive students to turn against their domestication and the attempt to domesticate reality. They may perceive the contradiction in which the banking education seeks to maintain them, and then engage themselves in the struggle for their liberation. The humanist educator cannot wait for this possibility to materialize. From the outset, his efforts must coincide with those of the students to engage in critical thinking and the quest for mutual humanization. His efforts must be imbued with a profound trust in men and their creative power. To achieve this, he must be a partner of the students in his relationship and necessarily so. In order to abolish the contradiction, the teacher needs to exchange his role as prescriber, as depositor to that of a person yearning to learn and communicate with students, a student among students.

Perhaps the teacher who can be more harmful and alienating is the one who is afraid to admit the

deficiencies of the system. He is aware of them, and thus tries to appear as truly liberal and willing to establish a dialogue by using slogans and carrying on meaningless, superficial discussions with his students. When a student desires to question deeply, he is accused of not being objective, of being slow, etc. Status quo maintaining students are almost always rewarded with good grades, jobs, research grants, special help and favors. The teacher rationalizes by saying these students are the most deserving and most in need and anxious to get ahead in life. What is the main reason for this internal conflict? It is a conflicting situation because the teacher is aware of the deficiencies of the educational system, but is afraid to go against regulations, of losing status.

When men are unable to use their faculties, unable to act, they attempt to reject their impotence by "creating the illusion of acting" (Freire, 1972:64-65). They feel that by lecturing about a charismatic leader, they themselves are active and effective. Banking educational methods cannot be used in a search for truth and knowledge, for it would be negating that very pursuit. Man must accept the idea that to seek knowledge and liberation is humanization. Humanization is a praxis: the action and reflection of men upon their world in order to transform it. It is a very difficult and painful process to begin

acting responsibly and reflecting upon one's actions instead of accepting prescriptions and rationalizing (Freire, 1970b: 454-56).

Implicit in the banking concept is the assumption of a dichotomy between man and the world: man is merely in the world, not with the world or with others, man is a spectator, not a transformer (Freire, 1970b:452-54). In this view, man is not a conscious being - he is rather the possessor of a consciousness, an empty "mind" passively open to the reception of deposits of reality from the world outside. In the banking concept of education, the professor's role is to decide what part of the world the student is to accept. His task is to mechanize a natural process. The educated man is the adapted man, because he is better "fit" for the world. Verbalistic lessons, reading requirements, the methods for evaluating "knowledge," the distance between the teacher and the taught, the criteria for promotion: everything in this ready-to-wear approach serves to obviate thinking (Freire, 1970a:210-212).

Human life can only exist when communication takes place. Freire believes that man can only be truly human when he is able to express himself, his ideas and feelings. The teacher's thinking is as authentic as that of the student's - he should not impose his thought on them.

The banking concept of education is based on a static view of consciousness, and thus attempts to control their thinking and behavior. It orients men to adjust to the world, and inhibits their creative power. In order to embody communication, the banking concept should be replaced with problem-posing education which nourishes the characteristic of consciousness. Liberating education consists in acts of cognition, not transferral of information.[1] Dialogue is a basic requirement: the terms "students" and "teachers" cease to exist and new terms arise - "teacher-student" and "student-teacher."

The teacher is no longer merely the one who teaches, but one who is himself taught in dialogue with the students who in turn are being taught, but also teach. They become jointly responsible for a process of growth. The students are no longer docile listeners, but critical co-investigators in dialogue with the teacher. The teacher presents the material to the students for their consideration and re-considers his earlier expositions as the students express their own. Students, as they are increasingly posed with problems relating to themselves in the world and with the world, will feel increasingly challenged and obliged to respond to that challenge.

---

[1]Taken from a conference held by Paulo Freire in Abiquiu, New Mexico, 1973.

IVAN ILLICH'S THEORY

Ivan Illich was born in Vienna in 1926. He studied philosophy and theology and earned his Ph.D. in history. Illich was a co-founder of the widely known and controversial Center for Intercultural Documentation (CIDOC) in Cuernavaca, Mexico. Ivan Illich has an interest in public education. He questions the value of extending obligatory schooling to all people. The right to learn for most men is curtailed by the obligation to attend school. Pupils do most of their learning without, and often despite their teachers. Everyone learns how to live outside school. People learn to speak, to think, to love, to feel, play and work without interference from a teacher. Half of the people in the world never set foot in school (Illich, 1970:28-30). They have no contact with teachers and they are deprived of the privilege of becoming dropouts. Yet, they learn quite effectively the message which school teachers transmit - that they should have school and more of it. Schooling inevitably polarizes a society; it also grades the nations of the world according to an international caste system (Illich, 1970:9-12). Countries are rated like castes whose educational dignity is determined by the average years of schooling of its citizens, a rating which is closely related to per capita gross national product.

The modern university does not provide the opportunity for a focused yet unplanned ideological exchange, and has set in its place instruction and so-called "research" (Illich, 1970:35-40). Education should make allowance for discussion-free dialogue between participants instead of a rigid classroom situation. Students see their studies as the investment with the highest monetary return, and nations see them as a key factor in development. The structural purpose of the modern university has little to do with the traditional search for and transmission of knowledge.

School initiates young people into a world where everything can be measured, including their imagination, and indeed, man himself (Illich, 1970:40). It is extremely difficult to evaluate personal growth, which cannot be measured against any rod, or any curriculum, nor compared to someone else's achievement. School pretends to break learning into subject matters, to build into the pupil a curriculum made of these prefabricated blocks and to gauge the results in an international scale. People who submit to the standard of others for the measure of their own personal growth apply the same ruler to themselves. They begin to categorize themselves - persons are cl ified according to their educational level. Education has been distorted: the university nowadays serves to sustain the

social myth of unending consumption of services. Pupils are so isolated in schools that they become alienated while they pretend to be both consumers and producers of their own knowledge (Illich, 1970:46-7). School prepares for the alienating institutionalization of life by teaching the need to be taught. Once this lesson is learned, people lose their incentive to grow in independence, they no longer find enlightenment in everyday experiences and close themselves to the surprises life offers when it is not predetermined by institutional definition. School either keeps people for life or makes sure they will fit into some institution.

Paulo Freire was Illich's teacher, thus there are many similarities in their theories about education. They have worked together in analyzing present education. Freire is more philosophic and tries to relate more to the social system. He makes a comparison between different societies and studies how the economic and educational institutions interact. Freire is more concerned with the internal conflicts and struggle of the individual. He has been very successful applying his methodology in Latin America. Freire's educational methods are extensively used by Latin educators, social workers, and sociologists. Many government projects, such as community development and educational institutes, have been designed according

to his ideas. Also, Paulo Freire's and Ivan Illich's philosophies are given major importance and priority in the social science curriculum. Their philosophies are in accordance. They are both concerned about abolishing the weaknesses: alienation and lack of identification, of self-growth, found in the educational system. They agree education should provide the opportunity for personal growth - it is more than just learning facts. The social structure is man-made, and consequently is transformable by man. How do students react to these philosophies? Are they in agreement? Are students aware of what education should do for them?

In the development of the literature review the interrelation between these theories and the attitudes tested in this study will become evident and clear.

PREVIOUS STUDIES ON STUDENTS' ATTITUDES

Freire's and Illich's theories on education have been presented. Their analyses deal with different aspects of education, very similar to those addressed in this study: reasons for going to college; the teachers' role; university-student relationships; characteristics of an educated person; and students' attitudes toward education. Some of the items rated in the questionnaire were derived from Freire's theory in order to measure their attitudes toward

education. These same topics have been analyzed in different studies also giving some background on students' attitudes. As the literature review progresses, the relationship between the previously cited theories and the attitudes being studied will become more clear and precise.

Student-Professor Relationship

The literature concerning the attitudes students have toward college professors indicates, according to the Roper Study (1969:34) that the majority of college students, 96% of the freshmen and 94% of the seniors, select items that are favorable toward professors. Studies in Oswego State College revealed that students were very clear about the expectations they hold for their professors. Among these items were characteristics such as: able and competent, fair in dealing with others, and sincerely interested in solving social problems. In general, they hoped their teachers would be individuals who would relate and be concerned about students, they expected them to be warm, understanding, helpful people. No student used terms like "scholar," "authority," or "expert in his field." Little was said about political beliefs and nothing about research (Schell, 1969:passim).

Thomas Banta's (1966:passim) study stressed the necessity for including the human element in the teacher. Those factors involving this variable were generally

judged to be important goals. Student humanization and inventiveness were rated highly, while student autonomy and student fulfillment were apparently less important. This seemed to indicate the importance of the human element in the social context as a goal of the university.

A comparative study of what the goals of New Mexico State University should be as perceived by students, faculty and administrators was conducted (Dunford, 1970: 70-73). Students were less concerned that the university goals include making students more aware of teachers, their work and environment (learning responsible inquiry, transmitting culture, imagination and creativity), although these latter variables were rated higher than the first. Respondents also felt that close social ties between members of the university were not a useful goal, nor was social leadership on the part of the university. It seemed as if students did not desire or could not achieve personal involvement with faculty members.

The above-cited studies agree with Freire's and Illich's theory about the relationship that should exist between students and teachers. Students' opinions indicated their desire for more communication. They aspired for meaningful dialogue and felt that lectures limit learning and inquiry. Students want to relate with their teachers in a more human manner - they felt the barrier

between students and professors should be abolished. It seems as though students view education in a way very similar to that of Freire and Illich in these aspects.

A conference on educational reform, in which the students were asked to voice their opinions and prepare a report presents the following findings: Education should not encourage the deferral to expertise on the part of either the student or the teacher - it should involve sharp questioning. It often seems as though the whole educational system conspires to discourage such questioning. The basic instructional tool of the university - the lecture - perverts the concept of critical evaluation by a) establishing the professor as an expert, and by b) making it extremely difficult to question him. Persons who have successfully established a dialogue are very rare. Faculty and administration should be both freed and encouraged to resume learning, both formally (in the classroom) and informally (Danish, 1966:9-10).

The students also felt that opportunities for more informal contact should be increased: 1) Additional coffee pots and lounges are sometimes as valuable as more classrooms and laboratories; 2) Elimination of professional and administrative titles; 3) The false dichotomy between teaching and research should be eliminated - research should be motivated by interest rather than by

institutional pressures. Professors and students should do research because it is appealing and challenging to them, not because administration requires a certain number of articles; 4) Professors should invite pupils for lunch more often (Danish, 1966:12-14). This would be an effort to eliminate the functional approach to class distinctions within the academic community by organizing the university in such a way that all of its members have a direct interest in all aspects of its organization, and that the point of departure for that interest is always academically oriented. For such a system to be practical it is obvious that students, faculty and administrators will have to drastically reorient themselves.

Studies analyzing differing attitudes of men and women report the following results: More women respondents, 41% of them, and 19% men, felt that faculty members were less receptive to students of their own sex. More men than women felt faculty members were "very favorable" or "somewhat favorable" pursuing their career or being in graduate school. Six percent of men and 9% of the women reported having heard a faculty member express beliefs that women's minds were unsuited to certain fields. Men seemed to be favored in being invited to take part in discussions with a group of faculty members. Women and men, 86%, feel equally free to go to at least

one faculty member about personal matters, and both sexes felt encouraged by faculty (Report on University Women, 1970:48).

With respect to ethnicity, studies done on Mexican-Americans reveal that Mexican-American females are likely to be rebellious toward teachers, especially when they are given direct orders. As Mexican-American males, they seem to prefer teachers who understand their problems, but who are firm and encourage them to do their work. The high score on need rejection obtained by the Mexican-Americans is further indicative of the negative attitudes they have toward education. They see the school and personnel as rejecting them and they are more likely than the Anglo-American to reject the school system in turn. It is hard to succeed when the teacher expects the student to fail. Mexican-Americans are sensitive to continuous insults of teachers and, thus, view them and the school in a negative way. This study was done with high school seniors who were about to enter college, therefore the information is relevant to this study (Ramirez, 1967:29). From all the studies examined, it can be summarized that students would like teachers with whom they can relate as humans, and that the majority do have positive attitudes toward teachers.

Communicating and Transforming Through Education

Pavalko (1968:45) analyzes the function the university performs both for society and its relationship to other institutions such as a) cultural transmission and innovation; and b) the role education has played in determining the distinction of individuals in class structure.

There is a significant difference among societies in their approach to education. In the United States several major studies have been done concerning the students' attitudes. One, that of Feldman and Newcomb (1969: passim), summarized a ten-year span of literature. Their findings report that college has an impact on students' values and attitudes and there are a number of variables that interact to bring about changes. Freshmen, due to their prior schooling, have predetermined ways of perceiving their educational experiences. The students' reactions to stimuli can be observed and often predicted in terms of behavioral challenge, whether modifying or reinforcing students' values.

As Feldman and Newcomb pointed out, freshmen are faced with an unfamiliar social organization and are confronted with new or different values, norms and role structures. The process of the freshman year involved the unlearning of past values and socialization, the pressure

to learn new norms and behavior structures. The freshman faces a challenge from the academic and social environment. As compared to freshmen, seniors are more independent, more creative, more critical, less authoritarian and dogmatic, and more liberal. Many students enter college with certain needs, attitudes and values that are frequently inconsistent with those of a society, and they go through a process of learning (Feldman and Newcomb, 1969: passim).

Similar findings are reported from Oswego State College: freshmen expect to find Oswego State College different from their previous school experiences. Eighty-nine percent were positive about their new environment. The majority of the students indicated that they most needed to understand the expectations of the college for them both academically and socially. The general impression that was given was that entering freshmen would strive to meet those expectations if they were made clear (Schell, 1969:8-9).

Another important study was the Roper Study. The findings were that 49% of the seniors think education needs some improvement, but it is basically sound, while 32% of the freshmen think it is basically sound and essentially good (Roper Study, 1969:11-13).

During four years, 1968-1971, Daniel Yankelovich

studied students' attitudes toward education. His findings were the following: 74% of the students felt education was very important, and about 50% also think that the institutions of education need change (Yankelovich, 1972: 38).

Consistent with these findings was Goldsen's study, which found that most students believe that the college or the university should provide a basic general education and appreciation of ideas. This belief was rated most important by 75%. Upperclassmen were almost unanimous in placing primary emphasis on a basic education and appreciation of ideas, whereas lowerclassmen emphasized vocational education. Characteristics of entering students such as socioeconomic background have an influence on the way they feel toward college. Socioeconomic status is usually indicated by father's occupation, family income, parental education, or some combination of these variables. The information that exists with respect to values, attitudes and experiences of entering college students is categorized by status background. Although these are only average differences, and are not always large, they are consistent in showing that students from lower status backgrounds differ from those of higher status backgrounds in ways that apparently are produced between the lower status groups and the demands and opportunities of the

college environment. Most studies of different campuses report that higher status students achieve greater social and academic adjustment than lower status students, but this finding is not always consistent. On some campuses the opposite situation has been known to exist. Due to these diverse findings, it was concluded that adjustment to college is caused by multiple factors, and varies according to the unfixed expectations and social environments (Feldman and Newcomb, 1969:264).

Thomas Rish's study tested two hypotheses: (1) Did male entering students differ from female entering students in their expectations for college environment and (2) Did the educational level of parents affect male entering students' expectations of female entering students? The findings in this study indicate that in attempting to identify students' expectations for the campus environment, it may not be useful to categorize them on only the basis of their parents' level of educational achievement. However, the fact that the first generation group tended to score higher on each scale of CUES[2] may indicate that a multi-factor social distinction, rather than a single factor, such as that of the education

---

[2]CUES is designed to describe the institutional climate of a campus through the perceptions and reportings of its students. The CUES instrument consists of 150 statements about college life-features and facilities of the campus as students perceive it.

level of parents, may be accurate in accounting for differences in expectations for the environment (Rish, 1970:5-7).

It has been established by Pace (1966) and Berdie (1967), that the sex of the respondent may be expected to influence expectations for the environment; that is, the positive or negative aspects students anticipate experiencing during their college years. Rish reports a significant difference between the sexes in their expectations as measured by the Awareness and Community Scales[3] in the College and University Environment Scales (CUES). His findings are consistent with Pace's study in 1966, except Pace reported on perceptions of students already in college, instead of freshmen. Berdie (1967) found that males and females had differing expectations for a university environment. The results of his study are different from Rish's on the Community and Scholarship Scales. Thus it is concluded that the relationship between sex of the student and his expectations for the campus climate may vary from campus to campus, and does not appear to be a

---

[3]Awareness Scale: the extent to which the environment emphasizes self-understanding, identity and reflection. Community Scale: the extent to which the campus is friendly, cohesive, sympathetic and supportive. Scholarship Scale: the extent to which the environment emphasizes academic and scholarly achievement.

predictable relationship (Rish, 1970:7).

Marden's study reports that Mexican-Americans can be viewed as unwilling competitors. Friendship and personal relationships are taken into account before deciding on a given goal that requires competition. The majority group, by virtue of power vested in it, is in a position to set the behavioral norms by which the minority group must operate. Usually these norms tend to be quite foreign to the minority group members. The minority group member, who feels awkward and ignorant in attempting to behave in the scope of these new norms, is frightened by the new demands of the situation, and thus, as a matter of fact, behaves in an inferior manner when compared to the majority group members. The longer the individual experiences this kind of treatment, the more timid he becomes. The bicultural individual faces so much anxiety, frustration, and stress at having to make value choices so often under such difficult conditions that he usually resolves the conflict by choosing one group and rejecting the other (Marden, 1952:32).

The levels of aspiration are related to the economic and educational circumstances of the individual. One finds that individuals with better economic means and higher levels of education aspire to higher levels than those with less economic means and less education. There

are a large number of studies concerning the Mexican-American in college, and they all seem to indicate that the system of education is against their culture and motivations. Referring once again to Illich's theory, the present educational system categorizes people in a caste system, according to the level of formal schooling the person possesses. Generally, the more schooling a person has, the greater his income and the higher his status. Mexican-Americans, as a minority group, regularly have not been granted the same opportunities for going to college, or employed in prestigious and high-paying jobs. As stated above, a minority group member always has to adjust to the values and norms imposed by the majority group. Since previous studies have revealed that most freshmen do not have definite points of view about college and their social environment, this study will test for any significant differences between Anglo- and Mexican-American freshmen.

The Champaign Report presents the following students' opinions: students felt that education was more than simple training, although training could be a part of one's education. They agreed that the mere transmission of knowledge was not education. They think American universities are too oriented toward vocational purposes. Institutions oriented toward vocational goals cannot

create the type of atmosphere in which real learning and growth take place. As a result, American institutions of higher education have become constricting rather than a freeing structure. The following are quotations from students:

> "Our desire is not just to replace old teaching methods with new; it is to free members of the academic community so that they might teach and learn in a style most suited to their abilities and desires. We could recognize that good ideas occur where you find them, and might as well come from an obnoxious freshman as from a tenured professor or college president."
>
> "The purpose of college may be 'education,' but its function in society is the production of graduates. The system of grades, credits and papers operates in a manner which progressively stifles the individual's desire to learn and seek knowledge. As a result, the symbol is valued over the substance."

These quotations can summarize the student's attitudes toward education (Danish, 1966:8-11). Students seem to inquire about the actual learning in present day education in the same manner as do Freire and Illich. Does education enable the student to transform his social environment, to make decisions? Or is he being molded to fit into the social milieu? Students have given considerable thought to the changes that could improve education nowadays. That is why it is so important to update the research on students' attitudes.

Students' Autonomy

Daniel Yankelovich reports that 75% of the students felt expressing their own opinion was very important in college life (Yankelovich, 1972:227). The Roper Study findings were that 48% of the students think they should definitely participate in the making of university policies. Dunford presented the finding that students in New Mexico State University were concerned that the university goals included the self-fulfillment, humanization and liberalization of the student for personal growth, ego-development and greater student political power and voice in administrative affairs (Dunford, 1970:70). Other studies report that Mexican-American students should have more of a voice in the setting up of school activities. Many of them feel that the present activities do not reflect their interests as evidenced by results of the word association test (Ramirez and Taylor, 1967:39). In the Champaign Report, students voiced their opinion about the role they should have in course planning. College faculties who set up course requirements, for whatever reason, are usurping a function which belongs to the student. Guidance from the faculty member to the student should be set up instead of specific course requirements. A student could be motivated by knowing he has a right to choose the style in which a course is to be conducted. Both the

qualities of the teacher and the needs of the student should be considered. The students felt that the educational system should be based on a basic philosophical principle of the fundamental rationality and decency of the individual and man's absolute freedom of choice on the other (Danish, 1966:passim). Freire and Illich would support the students' right to create their educational structures, to transform their social reality. Education, as viewed by them, gives man the power to make his own destiny, to play an important role in the social historical process.

Reasons for Going to College

Schell concludes that entering freshmen are coming to college for the same basic reason that students have entered college for generations. They are seeking to achieve success and a better way of life (Schell, 1969:7). Feldman and Newcomb report that many students enter college with certain needs, attitudes and values that are frequently inconsistent with those of society, and they go through a process of learning new values. According to the Roper Study, most of the students primarily wanted a mentally stimulating job, but also considered it in terms of economic returns. Yankelovich's findings were that the majority, 70%, gave as a reason for going to college a chance to make a contribution to society. The majority,

50%, also think of college as a practical matter, a means for a higher salary (Yankelovich, 1971:47). Entering students of lower socioeconomic status, in comparison to higher status students, are more likely to be oriented to college in terms of vocational or professional training, and less likely to be oriented in terms of intellectual growth (Baird, 1967a, 1967b; Feldman and Newcomb,1969: 277; Gottleif, 1969; Lane, 1960).

Characteristics of an Educated Person

The Roper Study indicates that the majority of the students, 75%, rated intelligence as a leading characteristic for being in education, while 57% also rate creative ability (Roper Study, 1969:14). Another study reports that entering freshmen tended to consider the educated person as different but no consensus emerged about the quality of the difference; 54% view college in vocational terms. About 20.2% saw the difference in material advantages, but the great majority tended to define the educated man in a non-material way (Schell, 1969:3). Students in the Champaign Report manifested that the educated person transcends training. Higher education in the past has been too oriented toward disciplines, methodology and the search for ordered knowledge. Higher learning should teach self-education more as self-understanding and growth. Training is usually considered the mark of an educated man.

> "A student is a person who is acting and seeking to recapture the patterns of his actions in words, and using those ideas expressed in words to inform his next action, he is learning and teaching, expressing his personal power (Danish, 1966: 9-11)."

Studies on Asian Students' Attitudes

The literature review concerning attitudes of Asian students is limited, in contrast to that on American students. Wendell Blanchard, who conducted a thorough study on Thailand, reports the important role of the family. The family is the base for social organization in Thailand, it commands the individual's primary values, loyalties and associations (Blanchard, 1958:421). Most Thai feel that both men and women should be modest, generous, respectful to elders and to others to whom respect is due, self-reliant and moderate (Blanchard, 1958:480).

With respect to the educational system, Blanchard found that with the introduction of new projects, the teacher has succeeded in establishing an informal relationship with his pupils. The usual relationship is one of great respect, and formality. With some new innovations in education, a more friendly and casual interaction has developed between students and teachers.

In this study, Asian and United States students' attitudes are compared for a difference that is expected. In some countries the teacher is more of a "man of knowledge"

than in other countries. The degree to which a nation's public regards the professors as public leaders and/or acknowledges them as experts on one hand or considers them domestic servants has been relevant in studies of cross-cultural education according to studies done in comparative education (Anderson, 1967:41).

Manoucher Pedram studies foreign students' reactions to United States educational practices in the University of Kansas, the great majority of the students being Asian. Most students generally agreed that American teachers are friendlier, more informal and possess a greater sense of humor, that class atmosphere is more flexible and provides for considerable student participation. They believed that less respect seems to be shown for the teacher and that American students do not possess a wide range of interests - they are less acquainted with daily issues of social, political and economic nature (Pedram, 1960:31).

Olga Lang, who made a study on the family and society of China, reports that although the respect and formality that used to exist between parents and children is now decreasing the ties to the family and society are still very strong (Lang, 1946:366-368). With this cultural background, and the information of students' attitudes from China, it is inferred that some significant differences will show up between American and Asian students.

HYPOTHESES

From the previous literature review, the following hypotheses have been formulated in an attempt to draw comparisons and similarities of students' attitudes in the United States and Asia as well as within the two ethnic groups in the United States, Anglos and Mexican-Americans. The purpose of this study is to provide some insight to questions concerning the social and educational environment. It is very advantageous to know how different cultural backgrounds affect the students' attitudes toward education in order to provide solutions to the present problems and conflicts encountered in the university.

1. Asian students are more collectively oriented in their reasons for going to college, while United States students are more concerned with individual interests.

This hypothesis is oriented toward an understanding of the different reasons students have for attending college and the influence society has upon their decisions. It is expected that a collective oriented society would make its members conscious of the interests of the nation and family, and thus there would be a motivation for a person to strive for or ignore a college education, depending on the prevalent collective needs. A society which emphasizes the development of an individual would

tend to make a person conscious of his personal growth and make this an important reason for attending college.

2. Asian students think the educated person should be more culturally oriented while United States students think the educated person should be more vocationally oriented.

This hypothesis examines how students view an educated person and the characteristics they consider more important. Cultural orientation implies having broader interests in life rather than limiting a person to a specific technical field.

3. Asian students think the teacher should be more professionally oriented in his activities while United States students think they should be more student oriented.

This hypothesis is concerned with the students' attitudes toward the activities a professor should give major importance: should a professor be more involved with activities concerning the students or those required by the institution?

4. United States students perceive less distance between themselves and their teachers than Asian students.

The way a teacher is regarded varies from country to country. In some countries a teacher is considered a "man of knowledge" and is held in great respect, but this attitude varies to a great extent from one society to another.

5. There are no significant differences between United States ethnic groups' (Mexican-Americans and Anglos) attitudes toward education, the professors' role, the characteristics of an educated person, and university-student relations.

This hypothesis studies the existing differences in freshmen students from the same country but from different ethnic and cultural backgrounds. The previous literature review led to anticipate no differences, for the freshman status involves many common characteristics which make the students' attitudes very similar.

6. The higher the family income the less students question present day education.

On the basis that the educational system is oriented toward maintaining society's status quo, it would be logical that students from high income families would question the educational system less than low income students. The latter would tend to be less satisfied with the educational procedures.

7. Socioeconomic status is not related to the reasons students have for going to college.

In this hypothesis a comparison will be made of how different elements of socioeconomic status - mother's and father's years of education, father's occupation and family income - influence the student's reasons for attending college.

8. Sex is not related to the attitudes students have toward education, the teachers' role, the characteristics of an educated person, and university-student relations.

CHAPTER III

METHODS

SAMPLING PROCEDURES AND DATA COLLECTION

In 1964-65, data were collected on attitudes of first year students enrolled in agricultural curricula in three Asian countries: Thailand, Taiwan, and the Philippines. The questions measuring students' attitudes toward education, professors' role, and the educated person were divided into two questionnaires since length precluded any one respondent from answering all of the questions. The questions designed to measure the socioeconomic variables are included on the first part of both questionnaires (see Appendix).

In Thailand the questionnaires were translated into the Thai language and administered to the 220 first-year students at Kasetsart University in Bangkok, giving 110 respondents for each questionnaire. In Taiwan the questionnaires were translated into Chinese and subsequently administered to a random sample of 99 first-year agricultural students at National Taiwan University in Taipei, and 99 at Taiwan Provincial Chung Hsing University at Taichung. This constituted one-third of the total Taiwan

freshmen. In each university, the two attitudinal questionnaires were applied, having one-half of the students responding to each. To collect data for the Philippine sample, the questionnaires were administered in English to a quota sample of 60 first-year students at the College of Agriculture, University of the Philippines, with half that number completing each questionnaire.

In the United States a modified version of the original questionnaire was used with a few added questions measuring students' attitudes toward present day education. These questions were designed following the theory of education proposed by Paulo Freire. Data were collected at New Mexico State University, Las Cruces, New Mexico, in the Spring of 1973. Two ethnic groups were sampled: Anglo-Americans and Mexican-Americans for the purpose of comparing differences between the group members. The Anglo sample consisted one-half of the total population of freshmen students in agriculture. There were 202 students enrolled in the Agricultural College, from which a random sample of 102 students was drawn. Letters were written asking the students to fill out the questionnaire, which was available in one of the offices of the Agricultural Building; one follow-up letter was sent out to non-respondents. Responses were obtained from 46 students who attempted to answer the questionnaire. Nine of these

students were Mexican-Americans; they were separated and added to the Mexican-American sample.

The total number of Mexican-Americans enrolling in the College of Arts and Sciences in the freshman year was 391. A quota sample of 50 Mexican-Americans was established as a target. Classes from the College of Arts and Sciences were visited and the students were asked to answer the questionnaire after class. This procedure, which required a great deal of time and cooperation, was necessary due to the small percentage of Mexican-Americans in every class. During this stage 42 questionnaires were administered. In the second stage a random sample of 20 Mexican-American freshmen was collected. This was obtained from a list of the total Mexican-American population of the College of Arts and Sciences from the Office of Chicano Studies and was made available by Ray Paz and Patricio Quintana, former and present director of Chicano Studies at New Mexico State University. Data from both samples, random and quota, were compared using chi square tests and no significant differences were found in their attitudes. Therefore a decision was made to combine the quota and the random sample into one. The total number of Mexican-American respondents was 71. Though the United States and Asian data were collected in two different decades, the dissimilarities resulting in the two samples

were attributed to diverse cultural backgrounds, since this characteristic appears of major importance.

MEASUREMENT OF VARIABLES

Though there are many versions of the definition of attitudes, there is a general consensus in the social sciences to refer to them as having three basic components: (1) cognitive, which refers to information and belief about objects or phenomena in question; (2) affective, which refers to feelings and these feelings emanate from many sources such as motives; and (3) behavioral, which refers to those tendencies to act or behave in certain ways (Engel, 1968:166). A Likert type scale was used to measure all attitudes encompassed by this study. All items were considered of equal "attitude value," and to each of which subjects responded with degree of agreement or disagreement (Kerlinger, 1964:484).

To overcome variability and reaction to individual items, several measures were grouped together and their scores added to obtain a composite measure. As in all attitude scales, the purpose of the summated rating scale is to place an individual somewhere along a continuum of the attitude in question. A "strongly agree" on some items meant one orientation, while a "strongly disagree" on other items meant the same orientation. For this

reason on some items it was necessary to reverse the direction of the scale in order to sum them. Such a composite of several indicants clearly measures the property quite differently from a single indicant (simple measure) of the property as a whole. This procedure has the advantage of enabling one to judge each indicant within its wider context. The resulting score rates an attitude in various perspectives and angles, yielding a more accurate and dependable measure. High and low scoring groups on each index were defined after an inspection of the distribution of each scale. The cutting points for the high and low scoring groups were arranged so that, as much as possible, the same number of cases were all covered in each category.

The first dimension, individualistic vs. collectively oriented, was measured by the following items:

"How important are these reasons to you for wanting to complete a Bachelor's degree program?

1. It will help me get a higher paying job.
2. My family wants me to.
3. I want the personal satisfaction of having more knowledge.
4. It will enable me to avoid hard and dirty work in life.
5. It will prepare me to be a better citizen."

Respondents were asked to indicate how strongly they agreed or disagreed on a four-point scale, and the items were summed together into a composite score. The higher the score the more individualistic the orientation.

The scale measuring whether an educated person should have broad interests in life or te technically oriented was based on the following items:

"What do you think is the responsibility of the university in contributing to the development of the attributes listed below? The educated man:

1. Has specialized, technical knowledge in some area which allows him to perform a job and thus earn money to support himself and his family.
2. Has a wider scope of general knowledge in subjects other than his specialty, and appreciates the contribution made to society by all areas of study.
3. Has some absorbing personal goals, hobbies, interests and sources of satisfaction."

The higher the scale score, the more cultural interests in life an educated person should be motivated to develop.

Five items asked students to indicate how they felt about a professional or student orientation of professors' activities:

"To what extent do you feel a university professor has a responsibility to perform in the following areas:

1. Engage in conducting research.
2. Engage in discussing career opportunities with students.
3. Engage in helping students with their personal problems.
4. Engage in extracurricular activities with students (clubs, etc.).
5. Engage in extension activities by talking to farmer or other civic groups."

The higher the scale, the more student oriented.

A four-point interval agreement-disagreement scale

was used to measure the rest of students' attitudes. The student-faculty distance scale was measured by rating the following statements:

"1. University students should feel free to take a personal problem to a teacher that he respects.
2. University students should feel free to disagree with the professor's opinion in the classroom."

The greater the score, the greater the distance perceived by students.

The student autonomy scale was measured by items:

"1. University students should have the right to strike and not attend classes as a protest against university policies which the majority of students feel is unfair to them.
2. Attendance in university classes should be optional for the student."

The higher the score, the more autonomy students think they should have.

The transforming vs. status quo maintaining scale was measured by items:

"1. Education today is directed more toward maintaining things as they are rather than actually provoking critical inquiry.
2. Education today provides man with the means of transforming his environment and not simply adapting to it."

The higher the score, the more status quo maintaining is education considered.

The score for the memorization scale was obtained by items:

"1. Education today can be compared to a bank account where one deposits facts and regurgitates information during examinations.
2. Most courses in the university require too

much memory of details and too little problem-solving ability."

The higher the score, the more memorization students think is involved in education.

Students rated the superficial communication scale with the following items:

"1. Present day education involves superficial communication, learning requires a more meaningful dialogue between students and teachers.
2. Class discussion is generally useless, there is little value listening to other students who usually know little about the subject matter."

The higher the score, the greater superficial communication students think exists.

The above cited attitudes were analyzed cross-culturally and tested further by introducing the respondents' characteristics as test factors: (1) sex; (2) place where raised. Place where raised was categorized as a) rural area, and b) town or city; (3) mother's and father's years of education, which was classified into a) $\leq$ 12 years of education (high school), and b) $\geq$ 13 years of education (college); (4) father's occupation was classified into a) skilled and professional and b) unskilled and semiskilled; (5) family income was categorized into high and low according to the median income in each country's sample.

ANALYTICAL METHODS

All the variables were analyzed utilizing cross tabulation and chi square tests. The independent variable, ethnicity, was analyzed to determine how it influences different attitudes toward education, the dependent variable. Other variables were introduced as control variables, such as socioeconomic status, sex and age to verify the two variable relationship by showing how it varies under different social conditions. The respondent's characteristics studied appeared to have no effect on the attitudes toward education.

In the cross tabular analysis, some classes were pooled in order to allow a more precise comparison since the sample number was small. In very few cases the expected cell number was less than 5, as it is customary to recommend. This topic has been subject to vigorous discussion since the number 5 appears to have been arbitrarily chosen. The investigations are scanty and narrow in scope, as is to be expected, since work of this type is time-consuming. William G. Cochran recommends the computation of chi square tests in tables with more than one degree of freedom and most cell expectations greater than 5 without correction for continuity. Since the great majority of the expectations in the tables for this study were greater than 5, and more than one degree of freedom

was involved, the use of chi square test without correction for continuity was considered appropriate (Cochran, 1952: 328-334).

CHAPTER IV

RESULTS

COLLECTIVE VS. INDIVIDUAL ORIENTATION

Hypothesis 1 states that Asian students are more collectively oriented in their reasons for going to college, while American students are more concerned with individual interests. As seen in Table 1, a very small number of American students is found in the collectively oriented category (no response from the Anglo sample and 8.45% from the Mexican-American sample). Contrastingly, more than 50% of the Asian responses were found in the collectively oriented category. The Philippine students are almost equally distributed in the Collective and the Individual categories, while 64.49% of Thai students and 72% of Taiwanese students were in the collective oriented category. The Philippine students are probably more similar to United States students because of the extended American influence. The Philippine educational system is designed after the American one. This seems to indicate that the social system - whether collectivity or individuality is stressed - has a direct effect on the orientation of the individual. The chi square test was significant at the .05 level.

TABLE 1

FREQUENCY DISTRIBUTION FOR COLLECTIVE AND INDIVIDUAL REASONS FOR GOING TO COLLEGE BY ETHNICITY

Reasons	Anglos % (No.)	Mex.Amer. % (No.)	Philippines % (No.)	Thailand % (No.)	Taiwan % (No.)	Total (No.)
≤13	0	8.45	54.05	64.49	72	
Collective	(0)	(6)	(20)	(69)	(72)	167
≥14	100	91.55	45.95	35.51	28	
Individual	(37)	(65)	(17)	(38)	(28)	185
	100	100	100	100	100	
Totals	(37)	(71)	(37)	(107)	(100)	(352)

X^2=113.99 significant at .05 level
significant at .01 level

d.f.=4

X^2=3.31 United States subsample
not significant at .05 level

Respondent characteristics including (1) sex, (2) place where raised, (3) years of fathers' education, (4) years of mothers' education, (5) family income, and (6) fathers' occupation were introduced as control variables. Cross tabular analysis and chi square tests were performed without altering the original relationship between ethnicity and the reasons for going to college.

CULTURAL VS. TECHNICAL ORIENTATION

Hypothesis 2: Asian students think the educated person should be more culturally oriented, while United States students think the educated person should be more technically oriented. In the United States sample, the percentage of Mexican-American respondents, 56.75%, that think the educated person should be more culturally oriented is greater than the Anglo percentage, 33.14%. In the Asian sample, 58.88% of Thai responses, and 69% of Taiwanese responses correspond to the culturally oriented category, while 45.95% of Philippine responses were found in this category. Once more, a similarity showed up between Philippine students and Anglo students. The percentage of Mexican-Americans that were culturally oriented is greater than that of the Philippine students. The difference in attitudes between Asian and United States students was significant. Table 2 indicates the number and

TABLE 2

FREQUENCY DISTRIBUTION TOWARD THE CULTURAL AND TECHNICAL ORIENTATION OF AN EDUCATED PERSON BY ETHNICITY

	Anglos % (No.)	Mex.Amer. % (No.)	Philippines % (No.)	Thailand % (No.)	Taiwan % (No.)	Total (No.)
≤ 7	64.86	42.25	54.05	41.12	31	
Technical	(24)	(30)	(20)	(44)	(31)	(149)
≥ 8	33.14	57.75	45.95	58.88	69	
Cultural	(13)	(41)	(17)	(63)	(69)	(203)
	100	100	100	100	100	
Totals	(37)	(71)	(37)	(107)	(100)	(352)

X^2=15.21 significant at .05 level
significant at .01 level

d.f.=4

X^2=4.97 United States subsample
significant at .05 level

the percentage of responses in each category. When this relation, ethnicity and the orientation an educated person should have, was controlled by introducing the respondents' characteristics, it remained the same throughout the analysis.

PROFESSIONAL VS. STUDENT ORIENTATION

Hypothesis 3: Asian students think the teacher should be more professionally oriented in his activities, while United States students think they should be more student oriented. Table 3 indicates that 71.38% of Anglo, and 54.93% of Mexican-American respondents are found in the student oriented category. It appears that Anglos are somewhat more student oriented than Mexican-Americans, the difference being significant. This may be because Anglos feel more accepted by teachers, expecting help and a closer relationship. Of the Asian sample, 78.38% of Philippine students, 57.94% of Thai students, and 56% of Taiwanese students responses belong to the student oriented category. The Philippine and the Anglo percentage is almost equally distributed. More resemblance is detected between Philippine and Anglos than Anglos and Mexican-Americans. Mexican-Americans, Thai and Taiwanese students appear to be more homogenous. The chi square test proved to be significant. When controlled by place where raised, mother's and father's years of education, father's

TABLE 3

FREQUENCY DISTRIBUTION OF PROFESSIONAL VS. STUDENT ORIENTED ACTIVITIES OF PROFESSORS BY ETHNICITY

Orientation	Anglos % (No.)	Mex.Amer. % (No.)	Philippines % (No.)	Thailand % (No.)	Taiwan % (No.)	Total (No.)
≤11	21.62	45.07	21.62	42.06	44	
Professional	(8)	(32)	(8)	(45)	(44)	(137)
≥12	73.38	54.93	78.38	57.94	56	
Student	(29)	(39)	(29)	(62)	(56)	(215)
	100	100	100	100	100	
Totals	(37)	(71)	(37)	(107)	(100)	(352)

X^2=11.97 significant at .05 level

d.f.=4

X^2=5.74 United States subsample significant at .05 level

occupation, and family income the relationship between ethnicity and attitudes was not significantly altered.

STUDENT-FACULTY DISTANCE

Hypothesis 4: United States students perceive less distance between themselves and their teachers than Asian students. To measure this attitude, three categories were used since the first examination of the data and cross tabular analysis revealed that the two initial categories needed to be divided and expanded. In Table 4 it can be observed that in the category that measures the greatest distance, ≥ 5, 2.7% of the responses are from the Anglo sample, 5.63% from the Mexican-American sample, and 35.14% from the Philippines, 20.56% from Thailand, and 17% from Taiwan. This is an indication that Asian students do perceive more distance between themselves and faculty than do United States students. In the United States sample there was little difference between Mexican-Americans and Anglos. However, there was a significant difference between American and Asian students.

ANGLOS AND MEXICAN-AMERICANS COMPARED

Hypothesis 5: There was no significant difference between United States ethnic groups' (Anglos and Mexican-Americans) attitudes toward education, the teachers' role, the educated person and university student relations. The

TABLE 4

FREQUENCY DISTRIBUTION OF STUDENT-FACULTY DISTANCE BY ETHNICITY

Student-Faculty Distance	Anglos % (No.)	Mex.Amer. % (No.)	Philippines % (No.)	Thailand % (No.)	Taiwan % (No.)	Total (No.)
≤2	32.45	33.80	10.81	21.50	25	
Less Distance	(12)	(24)	(4)	(23)	(25)	(88)
3-4	64.86	60.56	54.05	57.94	58	
	(24)	(43)	(20)	(162)	(58)	(207)
Greater Distance ≥5	2.70	5.63	35.14	20.56	17	
	(1)	(4)	(13)	(22)	(17)	(57)
	100	100	100	100	100	
	(37)	(71)	(37)	(107)	(100)	(352)

X^2=25.50 significant at .05 level
d.f.=8 significant at .01 level

X^2=.54 United States subsample
non-significant at .05 level

only significant differences that came to light were the students' attitudes toward the technical vs. cultural orientation of an educated person (Table 2, p.53) and the professional vs. student orientation professors should have (Table 3, p.55). When a chi square test was performed on the two United States subsamples, the result was a significant difference. The percentages in Table 2 (p. 53) point out that Mexican-Americans are more concerned with a broader perspective in the life of an educated person than limiting it to the technical orientation. More than half, 57.75%, of Mexican-American respondents belong to the cultural oriented category, and 35.14% of Anglo respondents are found in this category. This difference is probably due to the fact that the Mexican-American sample was obtained from the College of Arts and Sciences, while the Anglo sample was obtained from the College of Agriculture, which is more technically oriented. When the respondents' characteristics are used as test factors, the difference is not significantly altered. The distribution of responses in Table 2 (p. 53) shows Anglos to be more student than professionally oriented in the professors' activities as compared to Mexican-Americans. The percentage of Anglos that think the professors' activities should be more student oriented is 73.38%, while 54.93% of Mexican-Americans responded student oriented activities should be more

important than the professional ones. When control factors are introduced, the relationship is not affected.

Anglos and Mexican-Americans agreed in regard to the degree of memorization that takes place between professors and pupils and the adapting process to society which education supports. More than 50% of both ethnic groups are critical of education. They agree that there is too much memorization involved in learning - a true dialogue is not observed in the classroom. Tables 5 and 6 reveal that 78.38% Anglos and 80.28% Mexican-Americans are found in the category measuring the greater amount of memorization, while 59.46% of the Anglos and 66.20% of the Mexican-Americans believe that superficial communication takes place in the classroom. The percentages are more equally distributed in the Adaptation vs. Transformation and Student Autonomy Scale, although the majority do think that education gears the student to conform to the social environment instead of trying to transform it (Tables 7 and 8). The groups' attitudes were not significantly different at a .05 level.

In all the following tables the higher the score, the greater the attitude being measured.

TABLE 5

Frequency Distribution of Attitudes Toward the Existing Memorization in Education

Degree of Memorization	Anglos % (No.)	Mex.Amer. % (No.)	Totals % (No.)
Low ≤ 4	21.62	19.72	
Memorization	(8)	(14)	(22)
High ≥ 5	73.38	80.28	
Memorization	(29)	(57)	(86)
Totals	100	100	100
	(37)	(71)	(108)

X^2 = .05 non significant at .05 level

d.f. = 1

TABLE 6

Frequency Distribution of Attitudes Toward the Existing Communication in Education

Communication		Anglos % (No.)	Mex.Amer. % (No.)	Totals % (No.)
Meaningful Communication	≤ 4	40.54 (15)	33.80 (24)	(39)
Superficial Communication	≥ 5	59.46 (22)	66.20 (47)	(69)
Totals		100 (37)	100 (71)	100 (108)

$X^2 = .48$ non significant at .05 level.

d.f. = 1

TABLE 7

Frequency Distribution of Attitudes Toward
the Adapting vs. Transforming Function of Education

Adaptation vs. Transformation	Anglos % (No.)	Mexican-Americans % (No.)	Totals % (No.)
Transformation ≤ 4	40.54	59.46	
	(15)	(22)	(37)
Adaptation ≥ 5	49.30	50.70	
	(35)	(36)	(71)
Totals	100	100	100
	(37)	(71)	(108)

X^2 = .75 non significant at .05 level.

d.f. = 1

TABLE 8

Frequency Distribution of Attitudes Toward
Students' Autonomy in Education

Degree of Autonomy		Anglos % (No.)	Mexican-Americans % (No.)	Totals % (No.)
Low Autonomy	≤ 4	45.95	40.85	
		(17)	(29)	(36)
High Autonomy	≥ 5	54.05	59.15	
		(20)	(42)	(62)
Totals		100	100	100
		(37)	(71)	(108)

X^2 =.26 non significant at .05 level.

d.f. = 1

INFLUENCE OF FAMILY INCOME ON ATTITUDES

Hypothesis 6: The higher the family income the less students question present day education. Family income was treated as a test factor for various attitudes toward education in the American and Asian students. Family income was categorized into 1) High, and 2) Low, according to the median income in each subsample. The result of all the analyses reveals that income was not related to any of the attitudes. The hypothesis is not supported.

SOCIOECONOMIC STATUS AND COLLECTIVE VS. INDIVIDUAL ATTITUDES

Hypothesis 7: Socioeconomic status is not related to the reasons students have for going to college. This hypothesis is related to the previous finding of the collective versus individual reasons students have for attending the university. Socioeconomic status was integrated by 1) family income, 2) mothers' and fathers' years of education, and 3) fathers' occupation; and were analyzed one by one. Cross tabular analysis was utilized in each of the variables studied in order to detect any relationships between socioeconomic status and the reasons for going to college. Table 9 indicates the relationship between family income and reasons for going to college. During the testing with the different variables that were used to measure socioeconomic status, the results of the relationship remained highly significant.

TABLE 9

Collapsed Frequency Distribution of High and Low Income Students and Reasons for Going to College

Reasons for Going to College		Anglos % (No.)	Mexican-Americans % (No.)	Totals % (No.)
Collective	≤ 13	15.88	28.38	44.26
		(47)	(84)	(131)
Individual	≥ 14	16.55	39.19	55.74
		(49)	(116)	(165)
Totals		32.43	67.57	100
		(96)	(200)	(296)

$X^2 = 1.27$ non significant at .05 level.

d.f. = 1

INFLUENCE OF SEX ON ATTITUDES

Hypothesis 8: Sex does not influence students' attitudes toward education, the teachers' role, the characteristics of an educated person and university-student relations. Sex does not influence students' attitudes in the United States, Philippines, Thailand and Taiwan with respect to the professional vs. student orientation of professors' activities, the technical or cultural orientation of the educated person and their collective or individual reasons for going to college. In most samples the females constituted 30%, except for the Mexican-Americans where the females are 60.56% of the total. In the Philippines a chi square test was not performed, for only 5.41% were females. The chi square tests were performed on each ethnic group separately.

In the United States sample, Anglos and Mexican-Americans were asked to rate their attitudes toward present day education. This includes an evaluation of the importance of memorization in education, the existing communication in learning and the means provided by education to maintain or transform society. There is no significant difference in Anglos and Mexican-Americans in the Memorization and Superficial Communication scales. There was, however, a significant difference in the Transformation vs. Adaptations scale. Females in the Anglo sample

definitely score higher than the males (Table 10). This indicates that Anglo females think present day education is more of an adapting than a transforming mechanism. This was the only scale and the only ethnic group where sex was related to students' attitudes.

TABLE 10

Frequency Distribution of Transformation
vs. Adaptation Scale of Anglo Students by Sex

Transformation vs. Adaptation		Females % (No.)	Males % (No.)	Total % (No.)
Transformation	≤ 4	0	1	
		(0)	(12)	(12)
Adaptation	≥ 5	1		
		(15)	(10)	(25)

$X^2 = 12.11$ significant at .05 level

d.f. = 1

CHAPTER V

CONCLUSIONS ON HYPOTHESES

Of the eight hypotheses that were posed for this study, seven were supported and one was not supported. Hypothesis 1 was supported, stating United States students are more individualistic in their reasons for going to college. They attend college for personal and economic reasons. The percentage concerned with the family's or the nation's interest is very small. Asian students attribute collective motivation for their college attendance. These results are in agreement with previous studies in the United States whose findings report that entering freshmen have had the same reasons for attending college for many generations: seeking to achieve success and a better way of life (Feldman and Newcomb, 1969:277). In reference to existing literature on Asia, Blanchard writes on the importance of the family in the Thai society (Blanchard, 1958:421). Olga Lang emphasizes the strong ties between the individual, family and society in China (Lang, 1946:336-368).

Hypothesis 2 was supported. It compares the cultural versus technical orientation students think the educated person should have. Most United States students give more

importance to the technical orientation of an educated person than to broader cultural interests in life. This is in accordance with the existing literature that in most United States universities students think of education in vocational terms. Preparation for a technical function or a trade is the purpose of an education (Danish, 1966: passim). There is less concern with personal growth, inquiry and the relationship of the educated to other persons and society as a whole. This would support Freire's and Illich's theories that state that present day education alienates man instead of integrating him into the mainstream of society. Education, instead of making man more complete in all aspects of life, i.e., social participation and self-expression, tends to separate him and to decrease communication. It seems that in Asia the students think the educated person should have broader interests in their lives apart from their careers. Asian students manifest their opinion about American students being less informed about current events (Pedram, 1960:31).

Hypothesis 3 states that Asian students would favor professionally oriented activities in the professors' role while United States students would favor the student oriented activities. This was supported. Although the greater percentage of both samples was found in the student oriented category, there was a significant difference in

the professors' orientation between United States students and Asian students. A considerable number of Asian students scored high on professional oriented activities, but the Asian sample by itself is more student than professionally oriented (see Table 3, p. 55). United States students feel more favorable toward the professors being more involved in student oriented activities rather than professional activities. This finding indicates that students benefit more from a human, closer interaction with professors. It seems that most teachers are always too busy and have little or no time for students. The professors are too occupied with academic work to share valuable experiences and points of view with students. This finding is in accord with previous studies where students have manifested their desire to share more experiences with their teachers. This hypothesis also agrees with Freire's and Illich's theories concerning the relation of student-professor. Freire thinks there should be a duality: student-teacher and teacher-student. A dialogue between both persons allows for a process of learning and understanding. Increasing the communication will bring as a result a more human interaction.

Hypothesis 4 was supported. Asian students do perceive a greater distance between themselves and their professors than American students. This finding supports the

existing literature that reports foreign students think American teachers are more informal and that less respect is observed in the student-teacher relationship in the United States in contrast to Asia. The Asian social environment emphasizes formality and respect to a greater degree than the American social norms.

Hypothesis 5 is also supported since no significant differences were found between Mexican-Americans and Anglo attitudes toward education - the teachers' role, the educated person, and university-student relations.

Hypothesis 6 stating the higher the family income, the less students question present day education, was not supported. No significant differences were found between students of low and high incomes, with regard to their attitudes toward education.

Hypothesis 7 was supported. To test if students' socioeconomic status would affect their reasons for going to college, four variables were analyzed: family income, mother's years of education, father's years of education, and father's occupation. None of these variables affected the original relationship between ethnicity and the reasons to attend college.

Hypothesis 8 was supported since sex was not related to students' attitudes toward education, the teachers' role, and the characteristics of an educated person, or

their opinion on student-university relations.

This study shows how the social environment influences the students' disposition toward education and their roles in society. These are factors that deserve study and consideration when a change is trying to be introduced into the educational or social system.

APPLICATIONS

This study can be applied in very broad, but nevertheless important ways:

1) The knowledge of how the social environment influences the individual will at least help to provide an understanding of the interaction between them.

2) The findings of Hypothesis 2, which indicate the orientation an educated person should have according to the students' opinion, shed light on what aspects of education have been given major importance nowadays, and which aspects need to be emphasized. It may be commendable and inevitable to have different orientations in different colleges.

3) Hypotheses 3 and 4 support some approaches to education, as Freire's and Illich's. The barrier between student and professor appears to create an unnecessary distance which stifles a more profound relationship. Some of the formalities in existence could be done away with, certain programs and procedures could be implemented in

order to bring about a more active exchange of ideas and knowledge between students and teachers. Students think there is too much memorization involved in present day education. They also believe the communication between teachers and students is not meaningful. The majority of the students feel these are areas where education needs improvement. Further research could indicate which modifications would be more useful to decrease memorization, superficial communication, etc.

4) Most students agreed that education is oriented toward maintaining the status quo, instead of enabling them to transform society. A more thorough investigation could provide means that would enable students to participate actively in the making of their environment. Most students manifested their desire for more autonomy within the university - this may be an indication that they should be allowed more freedom in their academic lives.

SUGGESTIONS FOR FURTHER RESEARCH

The objective of this study was to direct a searching inquiry of the educational system from the students' perspective. The reason for making it cross-cultural was to test certain culturally bound values and to examine the relationship between students' attitudes and their societies. The findings revealed in this study denote that the social milieu definitely affects the students' attitudes toward education. Thus, the extent to which the social interaction of institutions and underlying values of society influence students' attitudes and goals is worth pursuing.

For further study larger samples are recommended, as well as more specific orientation of improvements that are to be made in the educational system. This would enable the researcher to make more appropriate conclusions and to be more confident in his analysis. It would also be helpful if more ethnic groups were represented. If enough countries were included, they could be grouped according to similar social aspects: economic, political, religious. More similarities and dissimilarities could be manifested. Also, the reasons for some of the attitudes that students hold could be better understood.

It is important to bear in mind that some improvements in one country, or for one ethnic group, represent

regression for another because of the differences in attitudes and goals. The culture and values of the society should be taken into account when the educational system is set up. It seems so easy to adapt a model from another social system. The result many times is anxious and frustrated students. This study emphasizes the point that most students would like to participate in designing the university's policies. This is only logical since they are the ones to be benefitted from the educational functions of the university. It is also obvious that they have valuable contributions to make and that they have a unique perspective on the university. A deeper and more extensive analysis in cross-cultural education justifies itself.

BIBLIOGRAPHY

Anderson, Arnold C.

1967 "Sociology in the Service of Comparative Education." Pavalko, Ronald M. Sociology of Education. F. E. Peacock Publishers, Inc. Itasca, Ill.

Baird, Leonard L.

1971 "Teaching Styles: An Exploratory Style of Dimensions and Effects." Educational Testing Service. Princeton, New Jersey (July).

Baird, Leonard L.

1967a "The Educational Goals of College-bound Youth." ACT Research Reports, No. 19. American College Testing Programs. Iowa City, Iowa.

Baird, Leonard L.

1967b "Family Income and the Characteristics of College-bound Students." ACT Research Reports, No. 17. American College Testing Programs. Iowa City, Iowa.

Banta, Thomas J.

1966 "The Goals of Higher Education." Journal of Higher Education 37(November):435-40.

Berdie, R. F.

1967 "A University is a Many-faceted Thing." Feldman, Kenneth and Newcomb, Theodore. The Impact of College on Students. Jossey-Bass, Inc. San Francisco, Calif. 1969.

Betz, Ellen L.

1970 "An Investigation of One Aspect of College Unrest: College Student Satisfaction." The Measurement and Analysis of College Student Satisfaction (March). New Orleans, La.

Blanchard, Wendall

1958 Thailand, Its People, Its Society, Its Culture. Hraf Press. New Haven, Conn.

Campbell, James H.

1972 "The Conflagration of a Straw Stalking Horse: Or People Learn All The Time." Kansas State University, Wichita, Kansas. ED 063-740.

Chang, Paul

1971 "Educational Trends in Southeast Asia With Special Reference to Problems of Improving the Quality of Education." International Review of Education (September):150-64.

Cochran, W. G.

1952 "The X^2 Test of Goodness to Fit." Annals of Mathematical Statistics, Vol. XXIII. Edwards Brothers, Inc. Ann Arbor, Mich.

Committee on University Women (Report of)

1970 "Women in the University of Chicago." (May) ED 041-537.

Danish, Paul

1966 Champaign Report: A Conference on Educational Reform - A Student's View. Champaign, Illinois. U. S. National Student Association (September) ED 063-891.

Dunford, Gary

1970 "A Comparative Study of What the Goals of N.M.S.U. Should Be as Perceived by Studerts, Faculty and Administration." New Mexico State University (July).

Engel, J. F., D. T. Killat and R. D. Blackwell

1968 "Attitude Formation and Structure." Chapter 9, in Consumer Behavior. Holt, Rinehard and Winston, Inc. New York, N.Y.

Feldman, Kenneth and Theodore Newcomb

1969 "The Impact of College on Students. Jossey-Bass, Inc. San Francisco, Calif.

Freire, Paulo

1970a "The Adult Literary Process as Cultural Action for Freedom." Harvard Educational Review 40, No. 2 (May).

1970b "Cultural Action and Conscientizacion." Harvard Educational Review 40(August).

1972 La Educacion Como Practica de la Libertad. Buenos Aires, Argentina: Tierra Nueva.

Goldsen, R. F.

1960 "What College Students Think." D. Van Nostrand Co. Princeton, N. J.

Gottlieb, D.

1962 "Social Class, Achievement and the College-going Experience." Feldman, Kenneth, and Theodore Newcomb. The Impact of College on Students. Jossey-Bass, Inc. San Francisco, Calif.

Huxley, Julian

1971 "Toward International Humanism." The University of Tennessee. International Education. Knoxville, Tenn.

Illich, Ivan

1970 Deschooling Society. Harper and Row, N.Y.

1971 "We Can Disestablish Schools or We Can Deschool Culture." Saturday Review (June).

Jacob, P. E.

1957 Changing Values in College: An Exploratory Study on the Impact of College Teaching. Harper and Row, Publishers, N.Y.

Kerlinger, Fred N.

1964 Foundations of Behavioral Research. Holt, Rinehard and Winston, Inc., N.Y.

Kravetz, Nathan

1970 "Planning for Change in Educational Structure Curriculum and Methods." United Nations Educational, Scientific and Cultural Organization (May). Paris, France.

Lane, W. C.

1960 "The Lower-class Girl in College." Feldman, Kenneth and Theodore Newcomb. The Impact of College on Students. Jossey-Bass, Inc. San Francisco, Calif.

Lang, Olga

1946 Chinese Family and Society. Yale University Press (November).

McComac, James D.

1971 "New Perspectives in International Education." International Education. The University of Tennessee. Knoxville, Tenn.

Marden, Charles F.

1952 Minorities in American Society. American Book Company. N. Y.

Pavalko, Donald

1967 Sociology of Education. F. E. Peacock Publishers, Inc. Stosea, Ill.

Pedram, Manouchehr

1960 "Kansas University Foreign Students' Reactions to U. S. Educational Practices." The University of Kansas. Lawrence, Kan.

Ramirez, Manuel and Clark Taylor

1967 "Sex Role Determinants in Attitudes Toward Education Among Mexican-American Adolescents." Sacramento, Calif. ED 039-957.

Rish, Thomas J.

1970 "The Relationship Between Entering Students' Expectations for the College Environment and the Level of Formal Education Completed by Their Parents." National Conference of the American College Personnel Association. ED 039-547.

Rokeach, Milton

1968 Beliefs, Attitudes and Values: A Theory of Organization and Change. Jossey-Bass, Inc. San Francisco, Calif.

Roper Research Associates, Inc.

1969 The Beliefs and Attitudes of Male College Seniors, Freshmen and Alumni. Prepared for Standard Oil Company, New Jersey (May).

Rosenberg, Morris

1968 The Logic of Survey Analysis. Basic Books, Inc. N. Y.

Sampson, Edward and Harold A. Korn

1970 Student Activism and Protest. Jossey-Bass, Inc. San Francisco, Calif.

Schell, Robert E.

1969 "S.O.S. for the Orientation Committee." State University College at Oswego (June). ED 040-444.

Wayne, Robert Murray

1972 Ethnic and Sex Differences as Related to Student Perceptions of a University Environment. New Mexico State University (July).

Yankelovich, Daniel

1972 The Changing Values on Campus. Washington Square Press (May).

APPENDIX

STUDENT ATTITUDE QUESTIONNAIRE

NEW MEXICO STATE UNIVERSITY

The answers you give to these questions will be kept strictly confidential. There is no way of identifying this questionnaire with you. Please answer each question as accurately as you can, AND PLEASE ANSWER ALL QUESTIONS. The attitude questions are best answered by your first reaction and without too much analysis.

We sincerely appreciate your time and cooperation.

No._____ 2, 3, 4

FIRST SOME QUESTIONS ABOUT YOU AND YOUR FAMILY

1. Sex (please check): 1)___Male 0)___Female 5

2. Age: ____ 6,7

3. Ethnicity - Circle one: Latin 1 Anglo 2 Black 3 8
   Indian 4 Other 5

4. In which year of university study are you now engaged? Circle one: 1 2 3 4 5 9

5. Are you married? 1)___Yes 0)___No 10

6. What is or what will be your specific university major curriculum or field of specialization?
   _____ 11,12

7. List the two jobs in order of your preference that you would like to have after completing all of your formal education. Be specific.

   First choice: _____ 13,14

   Second choice: _____ 15,16

8. Where did you grow up? Check only one of the following: 1)___On a farm 17
   2)___In a rural area but not on a farm
   3)___In a town or a city

9. What is your father's age and occupation? Be as specific as possible. 18,19
   Age_____ Nature of work_____ 20,21

10. What is your mother's age? Does she work for pay away from home? 1)___Yes 0)___No. If yes, 22,23 24
    what does she do?_____ 25,26

11. Indicate the highest grade level of education completed by your father and mother. Circle the number which corresponds to the highest number of years completed in school.

Father: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 18+ 27,28

Mother: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 18+ 29,30

12. How many brothers and sisters do you have?_____ 31

13. At the time you left home to attend the university, how many people were living together in your home? _____ people 32

14. What was the combined monthly income of these people living together in your home? $_____ 34 36,37

15. What is the source of money support for your university education this year? Estimate the percentage contribution to the total from each source.

Family and relatives	_____%	39,40
Friends	_____%	41,42
Yourself, savings	_____%	43,44
Parttime work	_____%	45,46
Loans (borrowed funds)	_____%	47,48
Other: (specify)_____	_____%	49,50
Total	100%	

16. What are your approximate costs of attending the university for one year?

University fees	$_____	51,52,53
Room	$_____	54,55,56
Food	$_____	57,58,59
Other	$_____	60,61,62
Total	$_____	63,64,65,66

17. While attending the university, do you live in a: Check one. 1)___Private Room 2)___Dormitory 3)___Boarding House 4)___At Home 5)___Other: (specify)_____ 67

18. Do you perform parttime work to earn money while attending the university? 68
1)___Yes 0)___No If yes, what kind 69
of work?_____ 70
How much money do you earn per month?
$_____ 71,72,73

BEFORE GOING FURTHER, READ THE FOLLOWING INSTRUCTIONS CAREFULLY!!!

The questions in the next section are all of the same general type. Each question involves your opinion about items related to your university education. There are no right or wrong answers to any of the questions and you should sincerely answer them as you honestly feel. Answers to the questions are made by circling a number from 1 to 4. These numbers are used so that you can show varying degrees of intensity of feeling about the question item. For example, a statement is listed. If you feel a very strong disagreement with the statement, you will circle the 1; if you disagree only mildly, circle the 2; if you agree, circle 3; and if you agree very strongly, circle the 4. There are other types of questions, but all will involve a situation where different intensities of feeling can be registered on a 1-4 scale.

Given below are some statements. For each of them, indicate how strongly you agree or disagree by circling the appropriate number (1-4) according to the scale below.

1. I strongly disagree with the statement.
2. I disagree with the statement.
3. I agree with the statement.
4. I strongly agree with the statement.

19. 1 2 3 4 The kind of job which I get after obtaining my university degree is not too important. It is the fact that I can get a higher paying job by having a university degree that is important. 5

20. 1 2 3 4 It is more important to work in an occupation that one likes rather than in a job that pays a high salary. 6

21. 1 2 3 4 University students should compete vigorously with each other in trying to obtain the highest grades in their courses. 7

22.	1 2 3 4	University students can learn from each other by studying together, i.e., discussing course work, asking each other questions, etc.	8
23.	1 2 3 4	University students should have the right to strike and not attend classes as a protest against university policies which the majority of students feel is unfair to them.	9
24.	1 2 3 4	Attendance in university classes should be optional for the student.	10
25.	1 2 3 4	The university should concern itself only with academic matters and not with students' behavior in their residences.	11
26.	1 2 3 4	University students should feel free to disagree with the professor's opinion in the classroom.	12
27.	1 2 3 4	University students should feel free to take a personal problem to a teacher that he respects.	13
28.	1 2 3 4	University students should not visit professors in their offices since it will appear they are seeking special favors.	14
29.	1 2 3 4	Education today is directed more toward maintaining things as they are rather than actually provoking critical inquiry.	15
30.	1 2 3 4	Education today provides man with the means of transforming his environment and not simply adapting to it.	16
31.	1 2 3 4	Education today can be compared to a bank account where one deposits facts and regurgitates information during examinations.	17
32.	1 2 3 4	Most courses in the university require much memory of details and too little problem-solving ability.	18

33. 1 2 3 4 Present day education involves superficial communication; learning requires a more meaningful dialogue between students and teachers. 19

34. 1 2 3 4 Class discussion is generally useless; there is little value listening to other students who usually know little about the subject matter. 20

Listed below are several reasons which students might have for wanting to complete a Bachelor's degree program in the University. How important are these reasons to you and how important do you think they are for the majority of other university students? Answer by circling the appropriate number (1-4) according to the scale listed.

1. This is not a reason at all.
2. This is a partial reason, but not an important reason.
3. This is an important reason.
4. This is a very important and compelling reason.

How you think the majority of students feel	Reason	How you feel about it	
35. 1 2 3 4	To gain social prestige.	1 2 3 4	21,22
36. 1 2 3 4	Because it will help me get a higher paying job.	1 2 3 4	23,24
37. 1 2 3 4	Because my family wants me to.	1 2 3 4	25,26
38. 1 2 3 4	Because I want the personal satisfaction of having more knowledge.	1 2 3 4	27,28
39. 1 2 3 4	Because it will enable me to avoid hard and dirty work in life.	1 2 3 4	29,30
40. 1 2 3 4	Because it will prepare me to be a better citizen.	1 2 3 4	31,32

Listed below are activities in which a university professor might engage. To what extent do you feel a university professor has a responsibility to perform in the various areas? Answer by circling the appropriate number according to the scale given.

A university has:
1. No obligation whatsoever in this area.
2. Some responsibility to perform in this area.
3. A definite responsibility to perform in this area.
4. An absolute obligation to perform in this area.

41. 1 2 3 4 Engage in conducting research. 33

42. 1 2 3 4 Engage in discussing career opportunities with students. 34

43. 1 2 3 4 Engage in helping students with their personal problems. 35

44. 1 2 3 4 Engage in extracurricular activities with students (clubs, etc.). 36

45. 1 2 3 4 Engage in extension activities by talking to farmer or other civic groups. 37

46. 1 2 3 4 Engage in political activity. 38

This question concerns the characteristics or attributes which educated people may possess. What do you think is the responsibility of the university in contributing to the development of the attributes listed below? Answer by circling the appropriate number (1-4).

The university:
1. Has no obligation to help develop this attribute.
2. Should contribute a little bit to development of this attribute.
3. Should contribute quite a bit to the development of this attribute.
4. Has a definite obligation in contributing to development of this attribute.

The educated man:

47. 1 2 3 4 Examines traditional values critically. 39

48. 1 2 3 4 Has specialized, technical knowledge in some area which allows him to perform a job and thus earn money to support himself and his family. 40

49. 1 2 3 4 Has a wide scope of general knowledge in subjects other than his specialty, and appreciates the contribution made to society by all areas of study. 41

50. 1 2 3 4 Has some absorbing personal goals, hobbies, interests, and sources of satisfaction. 43

NOW THE TYPE OF QUESTION CHANGES. READ EACH ONE CAREFULLY:

51. Which of the following best fits your concept of achievement for the university student? Check one. 44

1)___The level of achievement for a university student is not important as long as he qualified for his diploma.
2)___A university student should achieve nearer the average of his fellow students and not be conspicuously higher than the majority of other students.
3)___A university student should achieve to the highest level of his ability.

52. What was your grade point average for your first semester? _____ 45,46

53. Now in terms of your concept of and motivation for achievement, estimate where you will be satisfied to stand in your class at graduation time. (In terms of those graduating. Assume that people in all of these groups will receive a degree.).

1)___Top quarter 3)___Top three quarters
2)___Top half 4)___Bottom quarter 47

54. Vocational-type education is defined as that education which prepares a person to do a rather specific job. For students in agricultural curricula, examples of subjects included would be animal husbandry, agronomy, horticulture, agricultural economics, agricultural engineering, etc. Liberal education is defined as that education which allows people to gain

more of the personal satisfactions in life, get a wide scope of general knowledge, and appreciate the contributions made to society by other areas of study. For students in agricultural curricula, this would include psychology, history, literature, sociology, etc. What would you recommend as to the composition of the curriculum requirements for university students in Colleges of Agriculture? Check one. 48

1)___100% vocational type courses and no liberal arts courses.
2)___75% vocational type courses and 25% liberal arts courses.
3)___50% vocational type courses and 50% liberal arts courses.
4)___25% vocational type courses and 75% liberal arts courses.
5)___No vocational type courses and 100% liberal arts courses.

55. With which of the following statements do you most agree? Check one. 49

1)___The university should be highly selective on its admission policy and take only those who are capable of completing a B. S. degree.

2)___The university should not be very selective on admission policy but should have rather rigid and high requirements which will eliminate the poorer students before graduation.

56. With which of the following statements do you most agree? Check one. 50

1)___The university should give degrees to everyone who attends classes for four years, and not pay so much attention to requirements and grades.
2)___The university should give degrees only to those who achieve high standards of academic excellence, even if many students must leave without a degree.

57. Rank the following in terms of their importance to you with regard to your future occupation. Place a 1 in front of the most important one, a 2 in front of the next most important, a 3 in front of the next, and a 4 in front of the one of least importance to you.

_____Salary (income per year) 51
_____Security (little chance of losing job) 52
_____Social prestige afforded to you by having the job. 53
_____Interest in the actual work performed in your job. 54

58. Listed below are three kinds of aptitudes which university students should try to develop during their university study. How do you feel about their relative importance? Place a 1 in front of the one which you hope to develop the best or the one you feel is most important to develop. Place a 2 in front of the one of next importance, and a 3 in front of the one you feel is least important.

_____Gaining knowledge by memorizing facts. 55

_____Gaining ability to reason abstractly. 56

_____Gaining competence in solving problems. 57